

AMENDMENTS TO THE CLAIMS

- 1-10. (Canceled)
11. (currently amended) A continuous, suspension process for preparing polyolefin polymers having a bimodal or multimodal molar mass distribution from a monomer and at least one comonomer in the presence of a suspension medium in a first reactor and at least one downstream reactor which are connected in series and operated under different reaction conditions within each of the reactors, wherein an after-reactor is avoided and a total yield of more than 98% is obtained, the process comprises: collecting offgases leaving all the reactors; compressing the offgases in a compression stage to produce compressed offgases; cooling the compressed offgases to produce a cooled offgas material comprising a gaseous fraction comprising an inert gas, hydrogen, and the monomer and a liquid fraction comprising the comonomer and the suspension medium; separating the cooled offgas material into the gaseous fraction and the liquid fraction; recirculating the gaseous fraction into the first reactor; and recirculating the liquid fraction into at least one of the downstream reactors,
- wherein the compressed offgases are cooled in a gas scrubber by contacting with at least a portion of the liquid phase fraction.
12. (Previously presented) The process as claimed in claim 11, wherein the offgases are compressed to a pressure ranging from 0.5 to 2.5 MPa.
13. (Previously presented) The process as claimed in claim 11, wherein the offgases are compressed to a pressure ranging from 0.9 to 2.0 MPa.
14. (Previously presented) The process as claimed in claim 11, wherein the offgases heat up to a temperature ranging from 30 to 250°C while the offgases are compressed.
15. (Previously presented) The process as claimed in claim 11, wherein the compressed offgases are cooled to a temperature ranging from 0 to 100°C.
16. (Previously presented) The process as claimed in claim 11, wherein the compressed offgases are cooled to a temperature ranging from 20 to 50°C.
17. (Previously presented) The process as claimed in claim 11, wherein the cooled offgas material is separated at a pressure ranging from 0.5 to 2.5 MPa into the liquid fraction and the gaseous fraction, which are collected in a pressure vessel.

18. (Previously presented) The process as claimed in claim 11, wherein the continuous, suspension process is carried out in the presence of a Ziegler-Natta catalyst and hydrogen.
19. (Previously presented) The process as claimed in claim 11, wherein the first reactor contains hydrogen and at least one comonomer, the hydrogen concentration in the first reactor being higher than the hydrogen concentration in the downstream reactor, and the comonomer concentration in the first reactor being lower than the comonomer concentration in the downstream reactor.
20. (Previously presented) The process as claimed in claim 11, wherein the continuous, suspension process produces at least one polyolefin polymer comprising ethylene or propylene, and from 0 to 10% by weight, based on a total weight of the polyolefin polymer, of at least one alpha-olefin comprising from 4 to 10 carbon atoms.
21. (Previously presented) The process as claimed in claim 11, a wherein the suspension medium comprises a saturated hydrocarbon comprising from 4 to 12 carbon atoms, or a mixture of saturated hydrocarbons comprising from 4 to 12 carbon atoms.
22. (Previously presented) The process as claimed in claim 11, further comprising removing hydrogen and the inert gas from the continuous, suspension process, wherein at least one offgas stream from the first reactor is branched off separately from other offgas streams, the offgas stream from the first reactor comprising a large concentration of hydrogen and inert gas, and a low concentration of monomer and comonomer.
23. (Previously presented) The process as claimed in claim 11, wherein the gaseous fraction is recirculated to the first reactor via a regulatable valve.
24. (canceled).